FORM PTO-14	40		DOCKET NUMBER		APPLICATIO	SHEET_1_O		
1			DOCKET NOMBER		,			
2	ORMATION DISC TION IN AN APPL		NPW 301K		19/72	28,473		
			APPLICANTS	II 33711	TTIANE A D	LEDGED		
			DAVID J. EDLUN and R. TODD ST	•		LEDGEK		
		·						
			FILING DATE December 5, 2003	1 1				
		U.S. P.	ATENT DOCUMENTS	ENT DOCUMENTS				
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FIL DATE IF APPROP.		
R.L.C.	1,306,221	6/10/1919	Ellis		-			
	1,782,824	11/25/1930	Hechenbleikner					
	1,848,466	3/8/1932	Edmonds					
	2,132,151	10/4/1938	Fenske et al.					
	2,450,804	10/5/1948	Loy					
	2,609,059	9/2/1952	Benedict					
	2,824,620	2/25/1958	De Rosset					
	3,094,391	6/18/1963	Mader					
	3,144,312	8/11/1964	Mertens					
R.L.C.	3,208,198	9/28/1965	Rubin					
	-	FOREIGN	PATENT DOCUMEN	NTS				
	DOCUMENT NUMBER	DATE	COUNTRY	CLA	SS SUB CLASS	TRANSLATION YES NO		
R.S.C.	JP 45-14404	5/1970	Japan		-	X		
R.L.C.	JP 45-2642	9/1970	Japan			X		
R.J.C.	JP 57-145276	9/1982	Japan			х		
			OTHER DOCUMEN	NTS	. 4			
R.L.C.	English-la	anguage abstra	ct of Japanese Patent N	lo. 1-26	2903, 1989.			
R.L.C.	English-la	anguage abstra	ct of Japanese Patent N	o. 4321	50, 1992.			
R.L.C.	English-la	anguage abstra	ct of Japanese Patent N	o. 5132	230, 1993.			
EXAMINER Richard L. Chiesa DATE CONSIDERED March 11, 2004								

FORM PTO-14			DOCKET NUMBER		APPLICATION NUMBER		
INF CITA	ORMATION DISC	LOSURE	NPW 301K		10/78	18,473	
			APPLICANTS DAVID J. EDLUN and R. TODD STU	-		LEDGER	
			FILING DATE December 5, 2003		GROUP ART	UNIT 24	
		U.S. PA	TENT DOCUMENTS	3			
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FIL DATE IF APPROP.	
R.L.C.	3,336,730	8/22/1967	McBride et al.				
	3,338,681	8/29/1967	Kordesch				
	3,344,586	10/3/1967	Langley et al.				
	3,350,176	Green et al.					
	3,356,538	12/5/1967	Miekka et al.				
	3,368,329	2/13/1968	Eguchi et al.				
	3,428,476	2/18/1969	Langley et al.				
	3,439,474	4/22/1969	McKinley				
	3,447,288	6/3/1969	Juda et al.				
	3,450,500	6/17/1969	Setzer et al.				
R.L.C.	3,469,372	9/30/1969	Yamauchi et al.				
		FOREIGN	PATENT DOCUME	NTS	-		
	DOCUMENT NUMBER	DATE	COUNTRY	CL	ASS SUB CLASS	TRANSLATION YES NO	
R.L.C.	JP 1-145302	6/1989	Japan			X	
R.L.C.	JP 1-145303	6/1989	Japan			X	
R.L.C.	JP 1262903	10/1989	Japan	Ĭ		х	
			OTHER DOCUME	NTS		<u> </u>	
R.L.C.	English	language abstra	nct of Japanese Patent N	No. 514	790, 1993.		
R.L.C.	English-	-language abstra	act of Japanese Patent N	No. 4-3	38101.		
R.L.C.			act of Japanese Patent 1				
	Richaro			D 1	11, 20	004	

FORM PTO-	1449		DOCKET NUMBER		APPLICATIO		BER		
II .	FORMATION DISCL ATION IN AN APPL		NPW 301K		10/7	28,5	+73		
			APPLICANTS DAVID J. EDLUN and R. TODD ST			PLEDGE	ER		
			FILING DATE December 5, 2003	1					
		U.S. PA	TENT DOCUMENTS	ENT DOCUMENTS					
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS		. DATE PPROP.		
R.L.C.	3,469,944	/30/1969	Bocard et al.						
	3,486,301	2/30/1969	Bonnet						
	3,520,803	//21/1970	Iaconelli						
	3,524,819	3/18/1970	Guerrieri						
	3,534,531	Eguchi et al.							
	3,564,819 2	/23/1971	Neulander et al.						
	3,589,171 6	/29/1971	Haley						
	3,665,680 5	/30/1972	Heuser						
	3,713,270 1	/30/1973	Farr et al.						
	3,761,382 9	/25/1973	Hammond et al.				1		
R.L.C.	3,782,904 1	/1/1974	Fletcher						
		FOREIGN	PATENT DOCUMEN	VTS					
	DOCUMENT NUMBER	DATE	COUNTRY	CLA	SS SUB CLASS	trans YÉS	SLATION NO		
R.L.C.	EP 0434562 A1	6/26/1991	EPO		-	Х			
R.L.C.	JP 4-163860	6/1992	Japan				Х		
R.L.C.	JP 4-338101	11/1992	Japan				Х		
	OTHER DOCUMENTS								
R.L.C.	English-lar	nguage abstrac	t of Japanese Patent N	o. 6345	40.	31 - 3			
R. L.C.			t of Japanese Patent N						
R.L.C.			t of Japanese Patent N			•			
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FORM PTO-14	149		DOCKET NUMBI	ER	API	APPLICATION NUMBER			
	ORMATION DISC		NPW 301K		10	1728	8,47	3	
			APPLICANTS DAVID J. EDI and R. TODD	•			LEDGEI	R	
			FILING DATE December 5, 2	003	GR	OUP ART I	UNIT 72'	+	
		U.S. P.	ATENT DOCUME	NTS	<u>, </u>				
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS		SUB CLASS			
R.J.C.	3,787,038	1/22/1974	Tesner et al.						
	3,791,106	2/12/1974	Haley		-				
	3,839,110	Shankoff		·					
	3,849,076	Gryaznov et al.		_					
3,881,891 5/6/1975			Goltsov et al.						
	3,881,897	5/6/1975	Faure et al.						
	3,920,416	11/18/1975	Houseman		·				
	3,955,941	5/11/1976	Houseman et al.		-			1.5	
	3,972,695	8/3/1976	Buckley et al.		_				
R.L.C.	3,980,452	9/14/1976	Krumm et al.						
_		FOREIG	N PATENT DOCU	MENTS					
	DOCUMENT NUMBER	DATE	COUNTRY	CL	ASS	SUB CLASS	TRANS YES	SLATION NO	
R.L.C.	JP 6-134244	5/1994	Japan		_			X	
R.L.C.	WO 97/25649	7/1997	WIPO		_		X		
R.L.C.	WO 97/43796	11/1997	WIPO		_			X	
			OTHER DOCU	MENTS					
R.L.C.	English-	act of Japanese Pate	ent No. 617	6779	9, 1994.				
R.L.C.	English-	act of Japanese Pate	ent No. 705	7758	8, 1995.				
R.IC.	English-	act of Japanese Pate	ent No. 111	1620	02, 1999.				
EXAMINER	Richard	DATE CONSI	DERED Marc	h	11, â	2004	t-		

FORM PTO-1	449		DOCKET NUMBER				
	FORMATION DISC		NPW 301K		10/7	28,4	73
			APPLICANTS DAVID J. EDLUI and R. TODD ST	-		LEDGEI	₹ .
			FILING DATE December 5, 2003		GROUP ART	UNIT み牛	
		U.S. I	ATENT DOCUMENT	ENT DOCUMENTS			
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	DATE PROP.	
R.L.C.	3,982,910	9/28/1976	Houseman et al.				
	4,003,343	1/18/1977	Lee				-
	4,003,725	1/18/1977	Bunn, Jr. et al.				
	4,056,373	11/1/1977	Rubin				
	4,078,985	3/14/1978	Takeuchi				
	4,084,934	4/18/1978	Kumazawa				,
	4,098,959	7/4/1978	Fanciullo	Ī			V- M.
	4,098,960	7/4/1978	Gagnon				
	4,127,393	11/28/1978	Timmins et al.				
	4,132,668	1/2/1979	Gryaznov et al.				-
R.Z.C.	4,134,739	1/16/1979	Gulden et al.				
		FOREIG	N PATENT DOCUME	NTS			
	DOCUMENT NUMBER	DATE	COUNTRY	CLA	SS SUB CLASS	TRANSI YES	ATION ON
R.L.C.	WO 99/30806	6/1999	WIPO			Х	40.
R.L.C.	WO 99/65097	12/1999	ŴIPO			Х	
R.L.C.	WO 00/04600	1/2000	WIPO	Ī	_		х
	OTHER DOCUMENTS						
R.L.C.	English-l	anguage abstr	act of Japanese Patent N	Jo. 57-1	45276.		
R.S.C.	English-l	anguage abstr	act of Japanese Patent N	No. 1-14	5302.		
R.L.C.			act of Japanese Patent N				

FORM PTO-1	449			DOCKET NUMBER		APPLICATION NUMBER			
14	FORMATION DISC ATION IN AN APP			NPW 301K		10	772	8,47	3
				APPLICANTS DAVID J. EDLUN and R. TODD STU	•			LEDGE	R
				FILING DATE December 5, 2003		GR	OUP ART	TINUT 24	
		U.S.	PAT	ENT DOCUMENTS					
EXAMINER INITIAL	DOCUMENT NUMBER	DATE		NAME	CLASS	,	SUB CLASS		DATE PROP.
R.J.C.	4,197,152	4/8/1980		Palty et al.		-			
	4,238,403	12/9/1980		Pinto		-			
	4,248,688	2/3/1981		Gartner et al.					
4,254,086 3/3/1981				Sanders					
4,302,177 11/24/1981				Fankhanel et al.		-			
	4,313,013 1/26/1982			Harris		-			
	4,315,893 2/16/1982			McCallister		_			
	4,319,923	3/16/1982		Falanga et al.					
	4,329,157	5/11/1982		Dobo et al.		_			
	4,331,520	5/25/1982		Juda et al.		-			· • · · ·
R.L.C.	4,349,613	9/14/1982		Winsel		-			
<u>-</u>		FOREIG	GN P	ATENT DOCUMEN	ITS				
	DOCUMENT NUMBER	DATÉ		COUNTRY ·	CLA	ss	SUB CLASS	TRANS YES	LATION NO
R.J.C.	WO 00/27507	5/2000		WIPO .		-		х	
R. L.C.	WO 01/03086	1/2001		WIPO				X	
R.S.C.	EP 1065741 A	2 1/3/2001		ЕРО				Х	
		(OTHER DOCUMEN	TS					
R. L.C. English-language abstract				of Great Britain Pater	nt No. 2	2,30	5,186.		·
R. L. e. English-language abstract of WO 00/04600, 2000.				et of German language PCT Patent Application Serial No.				ial No.	
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FORM PTO	-1449	_	FORM PTO-1449			OCKET NUMBER		i	APPLICATION NUMBER		
17		IATION DISC N IN AN APP			N	JPW 301K		1	<i>o</i> /7 a	28,473	
		-:	-		D	PPLICANTS DAVID J. EDLUN and R. TODD STU	• •			LEDGER	
					R	ILING DATE December 5, 2003		GR	ROUP ART		
			_	U.S. PA	ATEN	IT DOCUMENTS	3	_			
EXAMINER INITIAL	r	DOCUMENT NUMBER		DATE		NAME	CLASS		SUB CLASS	FIL DATE IF APPROP.	
R.L.C	. 4,38	81,641	5/	/3/1983	Ma	dgavkar et al.		<u>L</u> .			
	4,38	87,434	6/	/7/1983	Mo	ncrief, Jr. et al.		_			
	4,40	00,182	8/	/23/1983	Dav	vies et al.		$\cdot $			
	4,41	17,905	11	1/29/1983	Bar	nks et al.		<u> </u>			
	4,422,911 12/27/1983 J				Jud	a et al.		<u>_</u>			
	4,43	4,430,304 2/7/1984			Spt	ırrier et al.					
	4,44	44,158	4/	/24/1984	You	on .		_			
	4,46	68,235	8/	/28/1984	Hill	l		<u>-</u>	·		
	4,47	72,176	9/	/18/1984	Rut	oin .		<u> </u>			
R.Z.C.	4,47	73,622	9/	/25/1984	Chl	ludzinski et al.		Ŀ			
				FOREIGN	PAT	ENT DOCUMEN	1TS				
	DOCU	UMENT BER		DATE		COUNTRY	CLA	rzż	SUB CLASS	TRANSLATION YES NO	
R. J.C	. wc	01/28662	2	4/2001	WIPO)		_]		х	
					OT	HER DOCUMEN	ITS				
R.J.C		Refor	mir		ne," T	Fluidized Bed M he Canadian Jour 1991).					
R.L.C		Reform Proces	mei ædii	er/PEM Fuel ings of the 1	l Cel 10 th W	"On Board Hy I Vehicle Powe Vorld Hydrogen I 1681-90 (June, 19	er Plar Energy	nts,	" Energy	v Progress X.	
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FORM PTO-1	449		DOCKET NUMBER		AP	PLICATION	N NUMBI	ER
1	FORMATION DIS		NPW 301K		-	0/78	18,4	73
			APPLICANTS DAVID J. EDLUN and R. TODD STU	-			LEDGE	R
			FILING DATE December 5, 2003		GR	OUP ART	UNIT 7 a 4	
		U.S. PA	TENT DOCUMENTS	}				
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS		SUB CLASS		DATE PPROP.
R.J.C.	4,504,447	3/12/1985	Spurrier et al.		_			
	4,533,607	8/6/1985	Sederquist		-			
	4,553,981	11/19/1985	Fuderer		_			
	4,567,857	Houseman et al.		_			,	
	4,589,891	Iniotakis et al.		-				
	4,642,273	Sasaki		-				
	4,644,751	2/24/1987	Hsu		_			
	4,650,814	3/17/1987	Keller					
	4,654,063	3/31/1987	Auvil et al.		-			
R.L.C.	4,655,797	4/7/1987	Iniotakis et al.		_			
		FOREIGN	PATENT DOCUMEN	NTS			•	
	DOCUMENT NUMBER	DATE	COUNTRY	CLA	ss	SUB CLASS	TRANS YES	LATION NO
			OTHER DOCUMEN	ITS				
Amphlett, J. C., et al., "Since Cell System," Fifth G. London, U.K., p. 8 (September 1988)			Grove Fuel Cell Sym	posiun				
R. L. C.	Disp	notion of Methane Ste us Alumina Membrane apan, pp. 41-44 (1993)	e React					
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FORM PTO-	1449		DOCKET NUMBER			ON NUMBER
	IFORMATION DIS CATION IN AN AP		NPW 301K		10/7	28,473
			APPLICANTS DAVID J. EDLUN and R. TODD STU	-		PLEDGER
			FILING DATE December 5, 2003		GROUP AR	TUNIT 724
		U.S. PA	ATENT DOCUMENTS	3		`
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FIL DATE IF APPROP.
R.L.C.	4,657,828	4/14/1987	Tajima			
	4,659,634	4/21/1987	Struthers			
	4,670,359	6/2/1987	Beshty et al.			
	4,684,581	8/4/1987	Struthers			
	4,699,637	10/13/1987	Iniotakis et al.			
	4,713,234	12/15/1987	Weirich et al.			
	4,751,151	6/14/1988	Healy et al.			
	4,781,241	11/1/1988	Misage et al.			
	4,788,004	11/29/1988	Pinto et al.			
R.L.C.	4,810,485	3/7/1989	Marianowski et al.			
		FOREIGN	PATENT DOCUMEN	NTS		
	DOCUMENT NUMBER	DATE	COUNTRY	CLA	SS SUB CLASS	TRANSLATION YES NO
			OTHER DOCUMEN	ITS		
R.L.C.			t Fuel Reformer for artment of Energy (July			rgonne National
R. L.C.	Econ	omical Steam R oosium, Common	d William Pledger, " Reformer for Fuel-Cell nwealth Institute, Lond	Syster	ns," Fifth	Grove Fuel Cell
EXAMINER	Richard	L. Chie	sa DATE CONSIDERED Ma	nch	۱۱,	2004

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FORM PTO-1	449		DOCKET NUMBER	- · ·	API	PLICATIO	N NUMB	ER
11	FORMATION DIS		NPW 301K		j	0/78	۶8,۲	+73
			APPLICANTS DAVID J. EDLUM and R. TODD ST				LEDGE	R
			FILING DATE December 5, 2003	•	GRO	OUP ART	A4	
		U.S. PA	TENT DOCUMENT	S .				
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS		SUB CLASS		DATE PROP.
R.Z.C.	4,838,897	6/13/1989	Amano et al.		_			
	4,849,187	7/18/1989	Uozu et al.		-			
	4,865,624	Okada		T -				
4,880,040 11/14/1989			Pierson et al.		_			
	4,904,455	Karafian et al.	<u> </u>	-				
	4,904,548	Tajima		_			, t ,,	
	4,946,667	8/7/1990	Beshty		-			
	4,981,676	1/1/1991	Minet et al.					
	4,999,107	3/12/1991	Guerif		-			-
R.J.C.	5,030,661	7/9/1991	Lywood		-			
		FOREIGN	PATENT DOCUME	NTS				
	DOCUMENT NUMBER	DATE	COUNTRY	CLA	ss	SUB CLASS	TRANS YES	LATION NO
						-		
			OTHER DOCUMEN	NTS	<u></u>		<u> </u>	
R.L.C.	React	lliam A. Pledger, "Th ial Applications," Tovember, 1994).	e Practi The 199	cal (Use of M Membrai	letal-Me ne Tech	mbrane inology	
R.L.C.	Light	mpact Methanol Refe" Fifth Grove Fuel (2, p. 42 (September 22)	Cell S	ymp	for Fue osium, (l-Cell P Commo	owered nwealth	
EXAMINER	Richaro	DATE CONSIDERED	ma	rc	h i	1,20	404	

FORM PTO-	1449		DO	CKET NUMBER				N NUMBER	
II .	IFORMATION DIS FATION IN AN AP		NP	W 301K		1	°/78	18,47	3
			DA	PLICANTS AVID J. EDLUN d R. TODD STU				LEDGER	
	•		ti i	ING DATE cember 5, 2003	_	GR	OUP ART	UNIT 24.	<u> </u>
		U.S. PA	ATENT	DOCUMENTS	3				
EXAMINER INITIAL	DOCUMENT NUMBER	DATE		NAME	CLASS	Ι,	SUB CLASS	FIL. DATE IF APPROP	
R.L.C.	5,032,365	7/16/1991	Aonc	et al.		_			
	5,126,045	6/30/1992	Kohl	heb et al.		-			
	5,139,541	8/18/1992	Edlu	nd		_		·	
	5,158,581	10/27/1992	Copl	an		_			
	5,205,841	Vaiman			_				
	5,215,729 6/1/1993			aum		_			
	5,217,506 6/8/1993			nd et al.		-			
	5,225,080	7/6/1993	Karb	achsch et al.		-			
	5,226,928	7/13/1993	Maka	ibe et al.		_			
R.L.C.	5,229,102	7/20/1993	Mine	t et al.		_			
		FOREIGN	PATE	NT DOCUMEN	ITS				
	DOCUMENT NUMBER	DATE	C	COUNTRY	CLA	ss	SUB CLASS	TRANSLATIO YES	NO
			ОТН	ER DOCUMEN	TS			<u> </u>	
R.J.C.	Light	," Fifth	Methanol Refo Grove Fuel (page no.), (Septe	Cell Sy	ymp	osium, (Commonwe	red alth	
R.L.C.	of P Proce React	in M rth Wo	"Application of tethanol-Based orkshop: Option ork, Catalytic M	Fuel misation	Cel n o	l Power of Cataly	red Vehicle tic Membr	es," ane	
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FORM PTO-	1449		DOCKET NUMBER		APPLICATIO	
	FORMATION DIS		NPW 301K		10/7	28,473
			APPLICANTS DAVID J. EDLUM and R. TODD ST	•		LEDGER
			FILING DATE December 5, 2003		GROUP ART	UNIT 24
		U.S. PA	ATENT DOCUMENTS	S .		
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FIL. DATE IF APPROP.
R. L.C.	5,259,870	11/9/1993	Edlund			
	5,326,550	7/5/1994	Adris et al.			
	5,335,628	8/9/1994	Dunbar			
	5,344,721	9/6/1994	Sonai et al.			
	5,354,547	10/11/1994	Rao et al.			
	5,376,167	12/27/1994	Broutin et al.			
	5,382,271	1/17/1995	Ng et al.			
	5,393,325	2/28/1995	Edlund			
	5,395,425	3/7/1995	Brown			
R.J.C.	5,401,589	3/28/1995	Palmer et al.			
		FOREIGN	PATENT DOCUMEN	NTS		
<u></u>	DOCUMENT NUMBER	DATE	COUNTRY	CLA	SS SUB CLASS	TRANSLATION YES NO
<u>.</u>						
			OTHER DOCUMEN	TS		
R.Z.C.	Knapton Platin	, A. G., "Pall um Metals Revi	adium Alloys for F ew, Vol. 21, 44-50 (19	lydroge 77).	n Diffusion	Membranes,"
R. L.C.	Polym	ner Fuel Cells,'	, "Compact Hydroge" Fifth Grove Fuel, p. 17 (September 22	Cell Sy	ymposium,	tems for Solid Commonwealth
EXAMINER	Richard	L. Chi	DATE CONSIDERED	ma	nch 1	1,2004

FORM PTO-1	449		DOCKET NUMBER					
II	FORMATION DIS ATION IN AN API		NPW 301K	NPW 301K 10/728,4				
			ì	APPLICANTS DAVID J. EDLUND, WILLIAM A. PLEDGER and R. TODD STUDEBAKER				
			FILING DATE December 5, 2003		GROUP ART UNIT			
U.S. PATENT DOCUMENTS								
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FIL DATE IF APPROP.		
R.Z.C.	5,417,051	5/23/1995	Ankersmit et al.					
	5,432,710	7/11/1995	Ishimaru et al.					
	Re. 35,002	7/25/1995	Matsubara et al.					
	5,449,848	9/12/1995	Itoh					
	5,458,857	10/17/1995	Collins et al.					
	5,498,278	3/12/1996	Edlund					
	5,500,122	3/19/1996	Schwartz					
	5,509,942	4/23/1996	Dodge					
	5,516,344	5/14/1996	Corrigan					
R.L.C.	5,518,530	5/21/1996	Sakai et al.					
		FOREIGN	PATENT DOCUMEN	VTS				
	DOCUMENT NUMBER	DATE	COUNTRY	CLA	SS SUB CLASS	TRANSLATION YES NO		
			OTHER DOCUMEN	ITS				
R.L.C.	Menzer, R., et al., "Fuel Processing in Fuel Cell Systems for Mobile Applications - Gasoline as Energy Carrier On-Bord," Fifth Grove Fuel Cell Symposium, Commonwealth Institute, London, U.K., (no page no.), (September 22-25, 1997).							
R.J.C.	Minet, R. G., et al., "Experimental Studies of A Ceramic Membrane Reactor for the Steam/Methane Reaction at Moderate Temperatures (400-700°C)."							
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FORM PTO-1449				D	OCKET NUMBER	UMBER /			APPLICATION NUMBER		
INFORMATION DISCLOSURE CITATION IN AN APPLICATION				N	NPW 301K 10/728,4			-73			
				L	APPLICANTS DAVID J. EDLUND, WILLIAM A. PLEDGER and R. TODD STUDEBAKER						
					LING DATE December 5, 2003		GR	GROUP ART UNIT			
		<u> </u>		U.S. PA	TEN	T DOCUMENTS	;				
	INER TAL		OCUMENT NUMBER	DATE		NAME	CLASS		SUB CLASS		DATE PROP.
R. Z	c. c.	5,52	0,807	5/28/1996	Му	rna et al.		.			
		5,52	5,322	6/11/1996	Wil	lms		-			
		5,52	7,632	6/18/1996	Gai	dner		-			
		5,53	6,405	7/16/1996	Му	rna et al.		-			
		5,580,523		12/3/1996	Bar	d		-			
		5,589,599		12/31/1996	Мс	Mullen et al.		-		•	
		5,61	2,012	3/18/1997	Sor	na et al.		_			
		5,61	6,430	4/1/1997	Ao	yama		_			
		5,63	7,259	6/10/1997	Gal	uszka et al.		-			
R. L	.c.	5,63	7,414	6/10/1997	Ino	ue et al.		-			
				FOREIGN	PAT	ENT DOCUMEN	ITS				
		DOCU NUMB		DATE		COUNTRY	CLA	ss	SUB CLASS	TRANS	LATION NO
					 -						
				<u> </u>	OT	HER DOCUMEN	TS			<u></u> !	
R.L	Oertel, Michael, et al., "Steam Reforming of Natural Gas with Integrated							egrated neering			
R. L	?. C.	Piwetz et al., "Hydrodesulfurization and Prereforming of Logistic Fuels for Use in							Use in ov. 17-		
EXAM	EXAMINER Richard L. Chiesa DATE CONSIDERED March 11, 2004										

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FORM PTO-1449			DOG	DOCKET NUMBER APPLICATION N								
INFORMATION DISCLOSURE CITATION IN AN APPLICATION				NP	NPW 301K 10/728,473							
					DA	APPLICANTS DAVID J. EDLUND, WILLIAM A. PLEDGER and R. TODD STUDEBAKER						
						15	NG DATE cember 5, 2003		GRO	FROUP ART UNIT		
					U.S. PA	TENT	DOCUMENTS	3				
EXAMINÉ INITIAL	R		UMENT MBER	DATE			NAME	CLASS		SUB LASS		DATE PPROP.
R.Z.	- .	5,639,	431	6/17/19	997	Shira	saki et al.		_		_	
		5,645,	626	7/8/199	97	Edlur	d et al.		_			
		5,658,	681	8/19/19	997	Sato	et al.		_			
		5,677,073		10/14/1	1997	Kawa	tsu		_			
	:	5,679,249		10/21/1	1997	Fendy	/a et al.		-			
		5,705,	082	1/6/199	98	Hinson			_			
		5,705,	916	1/6/199	8	Rudb	eck et al.		_			,
		5,712,	052	1/27/19	98	Kawa	tsu		_			
		5,714,	276	2/3/199	98	Okam	oto		_			
R. L. C	. :	5,734,	092	3/31/19	998	Wang	et al.					
	···			FO	REIGN	PATE	NT DOCUMEN	TS				
		DOCUME NUMBER		DAT	ГЕ	C	OUNTRY	CLA	ss	SUB CLASS	TRANS YES	LATION NO
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						ОТН	ER DOCUMEN	TS				
R. L. C		Privette et al., "Status of SOFCo SOFC Technology Development," presented at the 1996 Fuel Cell Seminar held Nove. 17-20, 1996 in Orlando, Florida, pp. 206-209.										
R.L.C		Shu, J., et al., "Catalytic Palladium-Based Membrane Reactors: A Review," The Canadian Journal of Chemical Engineering, Vol. 69, pp. 1036-60 (October, 1991).										
EXAMINER Richard L. Chiesa DATE CONSIDERED March 11, 2004												

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FORM PTO-1	449		DOCKET NUMBER		ON NUMBER			
14	FORMATION DIS ATION IN AN API	•	NPW 301K	NPW 301K 10/728,473				
			i	APPLICANTS DAVID J. EDLUND, WILLIAM A. PLEDGER and R. TODD STUDEBAKER				
			FILING DATE December 5, 2003		GROUP AR	TUNIT 124		
		U.S. PA	ATENT DOCUMENTS	S				
EXAMINER DOCUMENT DATE INITIAL NUMBER			NAME	CLASS	SUB CLASS	FIL. DATE IF APPROP.		
R.L.C.	5,738,708	4/14/1998	Peachey et al.					
	5,741,474	4/21/1998	Isomura et al.					
	5,741,605	4/21/1998	Gillett et al.					
	5,780,179	7/14/1998	Okamoto					
	5,782,960	7/21/1998	Ogawa et al.					
	5,795,666	8/18/1998	Johnssen					
	5,811,065	9/22/1998	Sterenberg					
	5,814,112	9/29/1998	Elliot et al.					
	5,821,185	10/13/1998	White et al.					
R. I.C.	5,833,723	11/10/1998	Kuwabara et al.					
		FOREIGN	PATENT DOCUMEN	NTS				
	DOCUMENT NUMBER	DATE	COUNTRY	CLA	SS SUB CLASS	TRANSLATION YES NO		
			OTHER DOCUMEN	NTS	1			
R.L.C. Teagan, W. P., et al., "Cost Reduction of Fuel Cells for Applications—Fuel Processing Options," Fifth Grove Fuel Commonwealth Institute, London, U.K. (September 22-25, 1997)						Cell Symposium,		
			<u> </u>					
EXAMINER Richard L. Chiesa Date considered March 11, 2004								

FORM PTO-	1449			DOCKET NUMBER	APPLICATION NUMBER				
	FORMATION DIS			NPW 301K 10/728,4-			73		
				APPLICANTS DAVID J. EDLUND, WILLIAM A. PLEDGER and R. TODD STUDEBAKER					
		·	- 11	FILING DATE December 5, 2003	}	GROUP A		UNIT 24	
		U.S. P	'ATE	ENT DOCUMENT	S				
EXAMINER INITIAL	DOCUMENT NUMBER	DATE		NAME	CLASS	SUB CLASS			
R.L.C.	5,858,314	1/12/1999	Н	Isu et al.	<u> </u>		-		
	5,861,137	1/19/1999	E	Edlund	-		\neg		
	5,874,051	2/23/1999	Н	Ieil et al.			-		
	5,888,273	3/30/1999	В	Buxbaum -			-		-
	5,897,766	4/27/1999	K	Kawatsu -			-		
	5,897,970	4/27/1999	Is	somura et al.			-]		_
	5,904,754	5/18/1999	Jı	uda et al.	—		-]		
	5,931,987	8/3/1999	В	Buxbaum			_		
	5,932,181	8/3/1999	K	Cim et al.	1		_		
R.L.C.	5,938,800	8/17/1999	V	errill et al.			$\overline{}$		
		FOREIG	N PA	ATENT DOCUME	NTS				
	DOCUMENT NUMBER	DATE		COUNTRY	CLA	ASS SUB CLAS		TRANSI YES	LATION NO
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FORM PTO-1449			DOCKET NUMBER		APPLICATION NUMBER					
	FORMATION DIS		NPW 301K	NPW 301K 10/728,473						
			APPLICANTS DAVID J. EDLUND, WILLIAM A. PLEDGER and R. TODD STUDEBAKER							
			FILING DATE December 5, 2003	3	GROUP ART UNIT 1724					
		U.S. PA	ATENT DOCUMENT	S						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FIL. DATE IF APPROP.				
R.L.C.	5,985,474	11/16/1999	Chen et al.							
	5,997,594	12/7/1999	Edlund et al.							
	5,998,053	12/7/1999	Diethelm							
	6,007,931	12/28/1999	Fuller et al.							
	6,042,956	3/28/2000	Lenel							
	6,045,772	4/4/2000	Szydlowski et al.							
	6,045,933	4/4/2000	Okamoto							
	6,054,229	4/25/2000	Hsu et al.							
	6,077,620	6/20/2000	Pettit							
R.L.C.	6,083,637	7/4/2000	Walz et al.							
		FOREIGN	PATENT DOCUME	NTS						
	DOCUMENT NUMBER	DATE	COUNTRY	CLA	SUB CLASS	TRANSLATION YES NO				
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	OTHER DOCUMENTS									
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FOF	RM PTO-1	449		DOCKET NUMBER		APPLICATION NUMBER			ĒR
INFORMATION DISCLOSURE CITATION IN AN APPLICATION				NPW 301K	NPW 301K 10/728,47.				
				APPLICANTS DAVID J. EDLUND, WILLIAM A. PLEDGER and R. TODD STUDEBAKER					
				FILING DATE December 5, 2003		GR	OUP ART	UNIT D. 4	
			U.S. PA	TENT DOCUMENTS	3	·			
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R.	L.C.	6,103,028	8/15/2000	Juda et al.		_			
		6,103,411	8/15/2000	Matsubayashi et al.	_	-			
-		6,152,995	11/28/2000	Edlund		-			
	1	6,165,633	12/26/2000	Negishi					
		6,168,650	1/2/2001	Buxbaum		-			
		6,171,574	1/9/2001	Juda et al.	_	_			
		6,183,543	2/6/2001	Buxbaum		-			
		6,190,623	2/20/2001	Sanger et al.		_			
		6,201,029	3/13/2001	Waycuilis		-			
R.	L.C.	6,221,117	4/24/2001	Edlund et al.		-			
			FOREIGN	PATENT DOCUMEN	ITS	AU QUA			
		DOCUMENT NUMBER	DATE	COUNTRY	CLA	ss	SUB CLASS	TRANS YES	LATION NO
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FORM PTO-1	449		DOCKET NUMBER		APPLICATION NUMBER					
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			i i	APPLICANTS DAVID J. EDLUND, WILLIAM A. PLEDGER and R. TODD STUDEBAKER						
			FILING DATE December 5, 2003		GROUP ART	UNIT 24				
		U.S. PA	TENT DOCUMENTS	5						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FIL. DATE IF APPROP.				
R.L.C.	6,238,465	5/29/2001	Juda et al.							
	6,242,120	6/5/2001	Herron							
	6,319,306	11/20/2001	Edlund et al.							
	6,395,405	5/28/2002	Buxbaum	Buxbaum —						
	6,458,189	10/1/2002	Edlund et al.							
	6,461,408	10/8/2002	Buxbaum							
	6,494,937	12/17/2002	Edlund et al.							
	6,537,352	3/25/2003	Edlund et al.							
	6,547,858	4/15/2003	Edlund et al.							
R.L.C.	6,632,270	10/14/2003	Edlund et al.							
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	DOCUMENT NUMBER	DATE	COUNTRY	CLA	ASS SUB CLASS	TRANSLATION YES NO				
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EXAMINER	EXAMINER Richard L. Chiesa DATE CONSIDERED March 11, 2004									